



# OpenMind

## **Sustainable Neurochemical Gratification and the Meaning of Existence**

By Nayef Al-Rodhan

When Aristotle famously claimed that the good life was not made in a summer, nor in a day, he implied that the best life was a life committed to contemplation. The question of what gives meaning to life has been central to philosophical inquiries for millennia. While no definite answer would appear to clarify or solve this fundamental question, a look into the neurochemistry underlying our feelings, thoughts and behaviour charts new grounds in this exploration. Moreover, it hints at ways in which gratification is relevant both to society and the world at large.

### **A long history of philosophical inquiries**

Existentialist thinkers emphasized the possibility of individuals being able to generate meaning through their actions. Sartre's statement that existence precedes essence is a rejection of the possibility that there could be any externally derived purpose to human life. It is simultaneously an argument that one's life is given meaning through specific actions. Nietzsche's philosophy carries a similar credo: that defining one's life creatively according to chosen actions makes a person who they are.

The ideas that one must live an "authentic" life and make choices that harmonize with a robust conception of the self are powerful, but leave unaddressed the question of what exactly it is that promotes authenticity. It is here that contemporary neuroscience can offer further insights, as a shared neurochemistry implies similar needs for achieving gratification. The human brain is "hard-wired" to seek pleasure and avoid pain, as well as to repeat acts that achieve gratification and avoid actions that cause discomfort. This process, which I previously called neurochemically mediated gratification implies that at a fundamental level, human beings are all seeking similar things. The difficulty is that at an individual level, such gratification might find expression in destructive actions, such as sustaining an addiction or engaging in criminal activity. It is thus crucial for societal policies to be fashioned and implemented with these challenges in mind.

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## **Neurochemical gratification: creating the right circumstances**

Our gratification is experienced neurochemically, irrespective of what prompts it. All of our feelings, emotions and experiences have a physical component insofar as they are mediated by neurochemistry. With the benefit of advanced scanning technology, we can observe that different mental processes change regional blood flow and chemistry in the brain. As such, we generally seek to feed our neurotransmitters (the chemical messengers transmitting signals within the brain) and boost the “feel good” chemical dopamine. It is likely that in time other neurochemicals relevant to various cognitive processes and gratifications will be identified and their specific actions known. However, to date, we know that the neurotransmitter dopamine, involved in reward processes in the brain, informs us which of our actions are more conducive to gratification and which are not. However, what exactly contributes to each of our respective forms of gratification and levels of dopamine as individuals can vary a great deal.

Not only is our gratification experienced on a personal neurochemical level but it is also attuned to our respective family and socio-political environments. In my paradigm of *emotional amoral egoism*, I discussed the relationship between our neurochemical underpinnings, the role of circumstances, morality and good governance. The fundamental feature encoded in our genetics is survival, meaning that the main driver of our actions will almost always be based in this instinct. Actions that are influenced by other drivers have a margin of fluctuation in strong alignment to our environment, including our moral compass and propensity for moral acts.

Like our human nature itself, our neurochemical make-up is modifiable, meaning that there is significant room for the environment to influence and mould both the motivators of our neurochemical gratification and our behaviour. Therefore, we will try and test many experiences but will predominantly choose to repeat those actions that gratify us in some way, no matter how unrealistic or influenced by our own perceptions they might be. Our gratification is highly individualistic and experienced subjectively, but it is also fluid and can be ‘instructed’ to a certain extent by the environment, repeated experiences, and exposures. This also implies that our neurochemical gratification might not be exclusively constructive, as we can opt for behaviour that is harmful to ourselves or others, such as forms of addiction or violence. The upside of this alterability, however, is that the foundations for this gratification can be influenced and turned into constructive forms of behaviour that meet societal expectations. In these situations, good governance plays a tremendous role. We might not be intrinsically moral, generous, altruistic etc., but living in a setting where basic survival and dignity needs are met will enhance our reflection, which is in turn subsequently required for *conscious* moral acts.

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Conversely, living in fear, deprivation, injustice and insecurity precludes morality in most cases, and prompts survival-driven acts. Harmful excesses of any kind promote a form of personal gratification that is very likely to affect both individuals people and society at large. However, ultimately, the meaningfulness of existence is individualistic and results from whatever brings each one of us most sustainable neurochemical gratification. What we can hope and strive for, collectively, is to create environments in which SNG comes from activities and beliefs that will create a balance between our personal wishes and acceptable values, both domestically and globally.

Neurochemistry teaches us that at the very basic level, we are fundamentally hardwired for survival and pre-programmed to 'feel good', often irrespective of what factors constitute the sources of our gratification or, in some cases, their social acceptability. To keep this gratification sustainable in a social and political setting, family, education and society need to create mechanisms whereby individuals associate gratification with behaviour that is positive and constructive both for the individual and for society. Anything from social norms to media outlets, educational systems or entertainment industries contribute to the way gratification is defined. In order to ensure functional social orders, it is crucial that gratification is linked to constructive behaviour, such as social responsibility, work ethic, lawfulness, empathy, tolerance and mutual respect.

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